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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,000	06/07/2006	Shinichi Inoue	3273-0226PUS1	9234
2292 7590 09/21/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER HEINCER, LIAM J	
			ART UNIT 1709	PAPER NUMBER
			NOTIFICATION DATE 09/21/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

## Office Action Summary

Application No.

10/582,000

Applicant(s)

INOUE ET AL.

Examiner

Liam J. Heincer

Art Unit

1709

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☒ Claim(s) 8,9,15 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/2006</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 8, 9, 15, and 16 are objected to because of the following informalities: Claim 8 reads "polymer as a hydrogenated natural polyisoprenoid" rather than "polymer that is a hydrogenated natural polyisoprenoid". Claim 9 reads "polymer as a product" rather than "polymer that is a product". Claim 15 reads "latex as a hydrogenated natural polyisoprenoid latex" rather than "latex that is a hydrogenated natural polyisoprenoid latex". Claim 16 reads "as a product" rather than "that is a product". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasagawa et al. (US 2003/0125475).

Considering Claims 1 and 8: Sasagawa et al. teaches a rubber-like material containing article (¶0001) comprising a hydrogenated (¶0001) polyisoprene/natural polyisoprenoid (¶0021). Sasagawa et al. also teaches the hydrogenated polymer as being a resin modifier (¶0036).

Considering Claim 2: Sasagawa et al. teaches the article as being made from (¶0041) a hydrogenated (¶0001) polyisoprene/natural polyisoprenoid (¶0021).

Considering Claims 3 and 9: Sasagawa et al. teaches the polymer as being a product of polyisoprene (¶0031) and hydrogen (¶0031) in the presence of a hydrogenation catalyst (¶0029) in a solvent (¶0032).

Considering Claims 4 and 10: Sasagawa et al. teaches a degree of hydrogenation of 50% or more (¶0018).

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Considering Claims 5 and 11: Sasagawa et al. teaches the polyisoprene as having a weight average molecular weight greater than  $20 \times 10^4$  (¶0020) and a molecular weight distribution of 2.0 or more (¶0020).

Considering Claim 12: Sasagawa et al. teaches a resin composition comprising a resin (¶0036) and a polyisoprene (¶0021).

Considering Claim 13: Sasagawa et al. teaches the resin modifier being present in an amount from 0.1 to 100 parts by weight per 100 parts by weight of the resin (¶0036).

Considering Claim 14: Sasagawa et al. teaches making a molded article from the resin composition (¶0041).

Considering Claim 15: Sasagawa et al. teaches the polyisoprene as being in a dispersion/latex (¶0040).

Considering Claim 16: Sasagawa et al. teaches the polymer as being a product of a polyisoprene dispersion (¶0021) and hydrogen (¶0031) in the presence of a hydrogenation catalyst (¶0029).

Considering Claim 17: Sasagawa et al. teaches a degree of hydrogenation of 50% or more (¶0018).

Considering Claim 19: Sasagawa et al. teaches an article comprising the polymer (¶0041).

Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Sasagawa et al. (US 2003/0125475).

Considering Claim 7: Sasagawa et al. teaches a method for producing a rubber like article (¶0041) comprising the step of subjecting a rubber composition comprising a hydrogentated polyisoprene/natural polyisoprenoid (¶0021) to molding or forming (¶0041).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e); (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6 and 18 rejected under 35 U.S.C. 103(a) as being unpatentable over Sasagawa et al. (US 2003/0125475) as applied to claims 2 and 15 above, and further in view of Miller et al. (US Pat. 4,963,623).

Considering Claims 6 and 18: Sasagawa et al. teaches the articles of claims 2 and 15.

Sasagawa et al. does not teach the polyisoprene as coming from the claimed sources. However, Miller et al. teaches obtaining a polyisoprene (1:19-21) from *Havea Brasiliensis* (1:13-15). Sasagawa et al. and Miller et al. are combinable as they are concerned with the same field of endeavor, namely polyisoprenes. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have used the polyisoprene from *Havea Brasiliensis* in the article of Sasagawa et al. as in Miller et al., and the motivation to do so would have been, as Miller et al. suggests, the high molecular weight of the polyisoprene (1:19-23).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO form 892.

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**Conclusion**

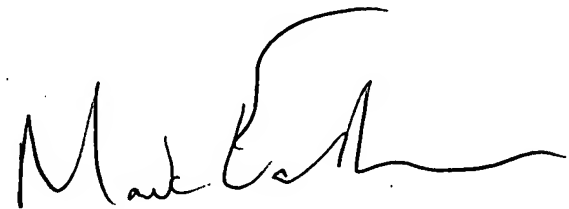
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Liam J. Heincer whose telephone number is 571-270-3297. The examiner can normally be reached on Monday thru Friday 7:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJH

September 10, 2007



MARK EASHOO, PH.D.  
SUPERVISORY PATENT EXAMINER

14/520/07